

EX PARTE OR LATE FILED  
VERNER · LIIPFERT  
BERNHARD · MCPHERSON & HAND ORIGINAL  
[CHARTERED]

901 - 15TH STREET, N.W.  
WASHINGTON, D.C. 20005-2301  
(202) 371-6000  
FAX: (202) 371-6279

MICHAEL M. PRATT  
(202) 371-6282

e-mail address:  
mmpratt@verner.com

September 5, 2000

BY HAND

Ms. Magalie Roman Salas  
Secretary  
Federal Communications Commission  
445 12<sup>th</sup> Street, S.W.  
Washington, DC 20554

RECEIVED  
SEP 5 2000  
FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

**Re: Ex Parte Communication in PP Docket No. 00-67**

Dear Ms. Salas:

On September 1, 2000, Lawrence Sidman and Michael Pratt of Verner, Liipfert, Bernhard, McPherson & Hand met with Jay Friedman, Legal Advisor to Commissioner Gloria Tristani, concerning issues relative to the above-referenced proceeding. Dave Arland of Thomson Consumer Electronics, Inc. ("Thomson") participated in the meeting by telephone.

Discussion at the meeting focused on the following matters: (1) the desirability of ensuring cable compatibility on an interim basis by requiring an 8 VSB output from a cable system or a cable set top box directly to a DTV receiver; (2) the indispensability of requiring PSIP and user data to be passed through to the receiver without alteration or degradation; and (3) the necessity of ensuring that the DFAST license does not impinge on the Fair Use doctrine or consumers' lawful expectations regarding home recording. Excerpts from Thomson's comments and reply comments in CS Docket No. 98-120 were distributed at the meeting and are enclosed. Also enclosed are series of press releases detailing Thomson's continued commitment to the digital transition.

In accordance with Section 1.1206 of the Commission's Rules, 47 C.F.R. § 1.1206, an original and one copy of this letter, including enclosures, are being filed with your office. Please direct any questions concerning this matter to the undersigned.

Respectfully submitted,



Michael M. Pratt

Enclosures

cc (w/o encl.): Jay Friedman

No. of Copies rec'd 011  
List A B C D E

■ WASHINGTON, DC ■ HOUSTON ■ AUSTIN  
■ HONOLULU ■ LAS VEGAS ■ MCLEAN ■ MIAMI

**STAMP AND RETURN**

**BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554**

**RECEIVED**

**OCT 13 1998**

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**

In the Matter of )

Carriage of the Transmissions )  
of Digital Television Broadcast Stations )

Amendments to Part 76 )  
of the Commission's Rules )

**CS Docket No. 98-120**

**RECEIVED**

**SEP 5 2000**

**FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY**

**COMMENTS OF  
THOMSON CONSUMER ELECTRONICS, INC.**

David H. Arland  
Manager, Government and  
Public Relations, Americas  
THOMSON CONSUMER ELECTRONICS, INC.  
P.O. Box 1976, INH-110  
Indianapolis, IN 46206-1976  
(317) 587-4832

Lawrence R. Sidman  
John M. R. Kneuer  
Sara W. Morris  
VERNER, LIIPFERT, BERNHARD,  
MCIPHERSON & HAND, CHARTERED  
901 15th Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 371-6206

**Counsel for Thomson Consumer  
Electronics, Inc.**

**October 13, 1998**

**IV. ROME WAS NOT BUILT IN A DAY: THE COMMISSION'S APPROACH TO DTV/CABLE COMPATIBILITY SHOULD BE INCREMENTAL, FOCUSING ON HOW BEST TO PROVIDE CONSUMERS WITH THE HIGHEST QUALITY DTV SERVICES AT EVERY PHASE OF THE TRANSITION.**

As the Commission is aware, the ATSC DTV standard was developed with the participation of virtually every industry sharing a role or interest in the launch of digital television -- including the cable television industry. Accordingly, the ATSC standard includes specifications for the transmission of DTV signals delivered both over-the-air (8 VSB) and via cable (16 VSB). The cable industry has chosen not to follow the ATSC modulation standard it helped develop, but instead has adopted a different and incompatible (but not necessarily better) modulation standard, using 64QAM and 256 QAM. While Thomson does not urge the Commission to prohibit the cable industry's selection of QAM over VSB, cable operators must ensure that consumers are not harmed by the cable industry's decision regarding modulation. Specifically, cable operators must bear the burden of making certain that cable subscribers have access to DTV broadcast signals throughout the DTV transition without limiting either the DTV services made available by broadcasters, or the functionality consumer electronics manufacturers build into their receivers.

**A. The Commission Should Adopt a Transitional Approach in Addressing Cable Compatibility Issues, and Should Encourage Industry-Based Solutions That Assure Consumer Access to Quality DTV Signals and Maintain DTV Receiver Functionality Throughout the Transition.**

As the Commission confronts the issues surrounding how best to ensure optimal compatibility between cable systems and digital television services, it is essential that it step back and recognize that, just as the existing NTSC broadcast system has developed over a period of nearly 60 years, so too will America's transition to DTV require time to unfold if it is to be done in an orderly and consumer-friendly way. Thus, the Commission should not create unrealistic expectations, particularly early in the transition, lest it thrust consumers -- and all other parties --

into a frantic and chaotic environment in which the search for the best solutions becomes lost or forgotten in the search for a solution.

To that end, Thomson urges the Commission to adopt a transitional approach to cable compatibility with DTV receivers which ensures, both in the short- and long-term, that no consumer subscribing to cable is denied either the ability to receive all available DTV signals in their intended quality and entirety, or the ability to enjoy all the receiver-based features which consumer electronics manufacturers such as Thomson will build into their receivers. A phased approach accomplishes a number of objectives critical to the success of the DTV transition. First, it ensures that consumers are assured of receiving a quality DTV signal *throughout* the transition period. Second, it allows consumer electronics manufacturers, cable operators and other parties to move beyond the point of trying to assign blame for a problem and to begin the process of resolving cable compatibility issues in a formal, open process which ultimately yields solutions that protect the integrity and functionality of consumers' DTV investments.

Thomson suggests this transitional approach include, at a minimum, the following two elements, each of which will ensure that, in the beginning and throughout the transition period, cable subscribers have access to the full array of DTV services broadcasters may wish to offer.

1. *Required Availability of an ATSC-Compliant Output by All Cable Operators.*

Commencing in the early part of the transition (*i.e.*, November 1, 1998) and until such time as alternative approaches to cable compatibility are nationally and uniformly available to consumers, the FCC should require cable operators to provide an ATSC-compliant (*i.e.*, 8 VSB) output of DTV signals for input directly into a DTV receiver.

Such an output could be accomplished in a number of ways. For example, a cable operator could simply "pass through" the digital broadcast by retransmitting it, without alteration,

within the existing 6 MHz channel. At the receiver, the signal either can be "passed through" the cable set top box without change and connected to the input jack on the receiver, or the cable can be directly connected to the jack and the receiver tuned to the appropriate channel. Under this scenario, all of the functions of the digital signal would be processed to the full capability of the DTV receiver, hence preserving cable consumers' flexibility to purchase receivers that offer as many or as few capabilities as they prefer, without fear that these features will be disabled due to compatibility problems. Such an option also would be inexpensive to the cable operator (who will devote no more capacity than it would to a normal 6 MHz analog channel). This "pass through" option is presumably the way analog cable systems will handle DTV signals to ensure that they are received by early generation DTV receivers without material degradation and in their entirety.

Alternatively, the digital broadcast 8 VSB signal can be converted to the digital standard used by the cable system at the head end -- whether 256 QAM, 64 QAM, or 16 VSB -- and transmitted to the set-top box where it could be remodulated back to its original 8 VSB and fed directly to the subscriber's DTV receiver.<sup>26/</sup> As in the case of the pass through scenario discussed above, all functions of the signal and the receiver would operate as if it were receiving the DTV signals over-the-air.<sup>27/</sup>

How cable operators decide to accomplish such an 8 VSB compliant output may and should be left to the discretion of the individual cable operator. However, given the enormous

---

<sup>26/</sup> Thomson supports the work of CEMA to develop standards for interfaces which translate either 64 QAM or 256 QAM into 8 VSB for input to DTV receivers (See EIA Document 762) and notes that work is ongoing in CEMA's R.4 Video Systems Committee to standardize such an interface for RF output to DTV receivers, in addition to addressing copy protection issues.

<sup>27/</sup> One advantage of this method over simple pass-through, however, is that the cable transmission can utilize only 3 MHz of bandwidth on the cable, yet maintain full functionality of the broadcast signal and DTV receiver.

negative consequences that cable incompatibility may cause for consumers, particularly in the early phases of the DTV transition, the underlying requirement to provide an ATSC-compliant signal for input to a subscriber's DTV receiver should be formalized by the Commission and maintained until the Commission determines it unnecessary.<sup>24</sup>

## ***2. Development of Standards for Cable-Ready DTV Receivers.***

The Commission should do everything in its power to facilitate the adoption of industry standards that will allow consumer electronics manufacturers to design cable-ready DTV receivers. The key to this process is agreement on a stable and uniform set of specifications to which cable operators will adhere, thus providing the requisite certainty to DTV receiver manufacturers essential to the design for mass production of cable-ready DTV receivers. Without question, the availability of truly cable-ready DTV receivers, which would eliminate entirely the need for -- and expense of -- a separate digital cable set-top box, will make DTV interoperability with cable virtually seamless and far more cost-effective for consumers. It will also enable consumer electronics manufacturers such as Thomson to implement new features and capabilities in their DTV receivers without fear of their being disabled by a set-top box. Moreover, cable-ready digital sets would cut through the signal encryption and copyright issues that continue to delay standards for interconnecting various boxes to the television set. Thomson supports the work already underway through CEMA's Cable Consumer Electronics Advisory Group (C3AG) process, which has presented the cable industry with a proposed standard for cable-ready DTV

---

<sup>24</sup> While Thomson recognizes that the cable industry has agreed to such an output upon the initiation of digital broadcasts this fall, it urges the Commission to memorialize this commitment in its rules. Moreover, any decision by the Commission to approve cessation of the 8 VSB requirement should take into account its effect on legacy receivers, which will not be retrofittable.

receivers<sup>29/</sup> and eagerly awaits the cable industry's response. It is essential that, like all industry-wide standards, standards for cable-ready DTV receivers be developed and negotiated through an official standard-setting body, such as CEMA, with the full participation of all affected industries.

**B. Adoption of Industry Standards Implementing the 1394 Interface Will Not Be a Panacea for Resolving Cable Compatibility Problems.**

As the Commission is well aware, the consumer electronics and cable industries have been engaged in an effort to establish standards that will enable the implementation of a digital bus through which DTV receivers could connect with multiple digital devices, including VCRs, DVD players, and cable set-top boxes, thus forming a complete integrated and interoperable system. Thomson, through its membership in CEMA, is committed to completing work on the baseline 1394 standard, as soon as practicable, and to making 1394-equipped DTV receivers available to the public as quickly as possible.<sup>30/</sup> The baseline 1394 interface, however, will not provide for optimal compatibility with cable systems and should not be lionized as such by the Commission. There are several reasons for this cautionary note.

First, a baseline 1394 standard cannot be used to receive encrypted or "scrambled" DTV signals, such as would be used to transmit copy protected programming, e.g., movies and pay-per-view offerings. As a result, the baseline 1394 interface will only work for DTV transmissions sent "in the clear" (e.g., over-the-air broadcast signals).<sup>31/</sup> As the Commission is aware, members

---

<sup>29/</sup> See Letter from Gary Shapiro, CEMA, to Chairman William E. Kennard (September 10, 1998) (discussing CEMA's involvement in the development of cable-ready DTV receivers and attaching proposed standards).

<sup>30/</sup> Thomson is proposing, through CEMA, its own 1394 copy protection standard.

<sup>31/</sup> We note, however, that, given the nature of digital technology, such "in the clear" transmissions also will be subject to potential unauthorized copying and editing. For example, it would be entirely possible for someone to digitally record, edit and duplicate, in unlimited numbers and without generational degradation, a movie such as "Titanic" once it is transmitted by a broadcaster in DTV.

of the creative community have attempted, so far without success, to approve a 1394 copy protection standard. Until these critical standards are adopted, the 1394 interface will not be capable of providing cable consumers with access to the full array of DTV programming and services.

Nor does the 1394 firewire resolve the problem that would be faced by the first DTV receivers coming into the market, the legacy receivers, which will not be "retrofitable." Finally, the 1394 interface approach, by its very design, assumes the need for a consumer to rent or purchase a cable set-top box. That is by no means the most consumer-friendly approach to receiving DTV over cable. Taken together, these factors render the 1394 firewire a partial and, most likely, interim solution to the cable compatibility issue which could well be made obsolete quickly when a superior approach (such as a cable-ready DTV receiver) is available.

**V. A COMPETITIVE MARKETPLACE WILL ENSURE CONSUMERS' EXPECTATIONS FOR OFF-AIR RECEPTION OF DTV BROADCAST TRANSMISSIONS ARE MET AND EXCEEDED.**

Notwithstanding claims by some, consumer electronics manufacturers have worked tirelessly — successfully — to ensure that every one of its DTV receivers is uniformly capable of receiving over-the-air DTV signals. Thomson is confident that its DTV receivers will be uniformly capable of receiving and displaying off-air DTV signals, with little to no difficulty or confusion being imposed upon the consumer, and has and will continue to devote substantial resources to ensuring that consumers purchasing its DTV receivers are entirely satisfied with their receiver's performance.<sup>32/</sup>

---

<sup>32/</sup> Specifically, Thomson, through its retail representatives, will work with consumers to ensure that he or she is equipped with an antenna that maximizes reception according to the customer's location. This process will make use of a comprehensive mapping project, conducted under the auspices of CEMA and USSB, which will enable retailers to match every consumer with the antenna most appropriate to their specific location.



RECEIVED

DEC 22 1998

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

BEFORE THE  
FEDERAL COMMUNICATIONS COMMISSION  
WASHINGTON, D.C. 20554

RECEIVED

SEP 5 2000

FEDERAL COMMUNICATIONS COMMISSION  
OFFICE OF THE SECRETARY

In the Matter of )

Carriage of the Transmissions )  
of Digital Television Broadcast Stations )

CS Docket No. 98-120

Amendments to Part 76 )  
of the Commission's Rules )

REPLY COMMENTS OF  
THOMSON CONSUMER ELECTRONICS, INC.

David H. Arland  
Manager, Government and  
Public Relations, Americas  
THOMSON CONSUMER ELECTRONICS, INC.  
P.O. Box 1976, INH-110  
Indianapolis, IN 46206-1976  
(317) 587-4832

Lawrence R. Sidman  
John M. R. Kneuer  
Sara W. Morris  
VERNER, LIPFERT, BERNHARD,  
MCIPHERSON & HAND, CHARTERED  
901 15th Street, N.W., Suite 700  
Washington, D.C. 20005  
(202) 371-6206

Counsel for Thomson Consumer  
Electronics, Inc.

December 22, 1998

**b. A Rule Requiring Carriage of the Full 6 MHZ DTV Channel, Including PSIP, User Data and Electronic Program Guides, Is Supported by the Record.**

Similarly, the record strongly supports the need for the Commission to adopt rules for cable carriage of DTV signals that require, regardless of the must carry obligation effecting their carriage, transmission of the DTV signal's entire 6 MHZ data stream,<sup>427</sup> including all PSIP<sup>428</sup> and program-related services (such as EPGs).<sup>429</sup> The importance of maintaining the integrity of the DTV signal when it is transmitted to a cable customer cannot be overstated. Any alteration or elimination of a broadcasters' PSIP data could introduce an unacceptable level of confusion and complication to the consumers' DTV experience. Similarly, any alteration or elimination of User Data, which is responsible for carrying important closed captioning and emergency data to the DTV receiver, could unacceptably put consumers at risk of losing access to this valuable and, in some instances, life saving information.

---

<sup>427</sup> See Comments of ALTV at 17; Barry Telecommunications at 5; Broadcast Group at 17; Capitol Broadcasting at 4; CEMA at 8; Chris-Craft/United Group at 4; Circuit City at 6; Cordillera Communications at 4; Corporation for General Trade at 13; Entravision at 10; GemStar/Starsight at 18; Golden Orange Broadcasting at 6; Granite Broadcasting at 9; Harris at 7; KSLs/KHLS at 2; Lee Enterprises at 6; Maranatha Broadcasting at 6; MSTV at 28; MECA at 2; Morgan Murphy and Cosmos Broadcasting at 10; Named State Broadcasters at 5; NAB at 37; National Association for the Deaf at 3; National Datacast at 2; NASA at 2; Paxson at 27; Pegasus Communications at 6; Philips at 2; Public Broadcasters at 44; Retlaw Enterprises at 4; Shockley Communications at 3; Sinclair at Note 5; Sony at 8; Station Representatives Association at 8; UPN Affiliates Association at 4; and Zenith at 2.

<sup>428</sup> See Comments of ALTV at 73; Broadcast Group at Note 38; CEMA at 13; Morgan Murphy and Cosmos Broadcasting at 15; MSTV at 34; NAB Attachment G at 7; NBC at 5; Philips at 2; Sony Electronics Inc. at 9; and Station Representatives Association at 8.

<sup>429</sup> See Comments of ALTV at 73; Broadcast Group at 16; GemStar/Starsight at 18; MSTV at 37; NBC at 7; Station Representatives Association at 9; and Zenith at 10.

As with material degradation, the cable industry has chosen to remain largely silent on these issues, leaving both consumer electronics manufacturers and broadcasters guessing as to whether cable operators, whether carrying DTV signals pursuant to a must carry obligation or retransmission consent, will carry broadcasters' DTV signals in their entirety, or if they will pick apart or alter the data contained in these signals for their own pecuniary interests. For consumers, this silence only serves to heighten the uncertainty surrounding their ability to access DTV signals and services in as robust and high quality a manner via cable as might be achieved over-the-air. Parents cannot be sure their DTV receiver's "V-chip" will receive the information it needs to activate ratings-based program blocking. Residents in areas hit by severe weather cannot be sure if their DTV receiver, hooked up to cable, will deliver local broadcasters' emergency information and weather warnings. Deaf consumers subscribing to cable cannot be sure that their DTV receiver will display closed captioning information. And no consumer will be confident that they will have access to competitive electronic program guides, particularly those provided by broadcasters.<sup>29</sup> In light of reports of some cable operators stripping EPGs out of the vertical blanking interval in the NTSC context, this issue assumes heightened importance for the digital era. In a universe with hundreds of channels of programming, EPGs will be integral to

---

<sup>29</sup> Thomson associates itself with those commenters who urge the Commission to define "ancillary and supplementary" services, in the context of DTV (*i.e.*, not qualified for carriage under must carry), as those services for which the subscriber must pay, as opposed to those that are available to consumers free over-the-air, including advertiser-supported services. *See, e.g.*, Comments of ALTV at 69; Broadcast Group at 19; Morgan Murphy and Cosmos Broadcasting at 14; MSTV at 29, Note 77; NAB at 39; National Datacast at 2; Paxson at 27, Note 59; Sony at 8; Station Representatives Association at 8.

consumers' access to DTV services. Cable operators must be precluded from denying consumers the ability to utilize competitive EPGs<sup>21/</sup>.

In that regard, Thomson is very troubled that certain digital cable set-top boxes apparently do not plan to support the broadcasters' PSIP protocol.<sup>22/</sup> The wide scale deployment of such devices puts subscribers at risk of having to search endlessly through the entire channel band for their desired programming, or relying on and paying for proprietary EPGs supplied by the cable operator. Such a Hobson's choice is the antithesis of the consumer-friendly approach to DTV for which the Commission has long strived.

Thomson again urges the Commission to adopt rules in this proceeding that ensure that cable consumers have unimpeded access to broadcasters' DTV signals in their full, unaltered, undegraded form and integrity. Specifically, the Commission should adopt the following set of minimum requirements, either as part of a must carry regime, or as technical standards governing cable retransmission of DTV broadcast signals:

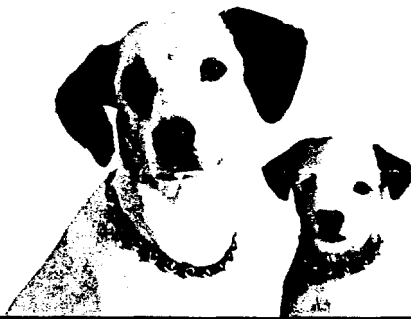
1. A cable operator must make available to its subscribers all DTV signals in the format originally transmitted by the broadcaster, as received at the cable headend. Any downgrading of a DTV signal's video format to one of lesser resolution is expressly prohibited.
2. A cable operator must make available to its subscribers all DTV channels in their entirety, including the maintenance of program-specific information in the PSIP. Any alteration or deletion of any of the other data contained in the 6 MHz channel, such as User Data and broadcaster-transmitted navigational and program-related information, is expressly prohibited.

---

<sup>21/</sup> These concerns are set forth at length in the Comments of Gemstar.

<sup>22/</sup> See Comments of General Instrument at 5-7; See also Reply Comments of BellSouth Interactive Media at 5 and Note 18.

# RCA



# NEWS

---

**News Media Inquiries:** (317) 587-4450

**Contact:** Dave Arland, ArlandD@tce.com James Harper, HarperJ@tce.com

**www.rca.com**

---

## **NEW HDTV LINEUP FROM RCA AND PROSCAN EMPHASIZES CONSUMER CHOICE, LOWER PRICE POINTS**

***Fully Integrated Direct-View, Projection Models Promise  
Affordable Choices for Stunning Reality of Digital Performance***

INDIANAPOLIS, August 18, 2000 - The commitment of THOMSON multimedia's (NYSE: TMS) RCA and PROSCAN brands to expanded availability of digital television takes on new dimensions this year with the introduction of the industry's broadest variety of fully integrated HDTV models including the world's largest direct-view 16x9 widescreen HDTV.

"We are confident that the broad choice of screen sizes and designs, plus price points 50 percent lower than last year's models, will spur a growing number of consumers to acquire the lifelike home entertainment capability of digital HDTV," said Thomson's Mike O'Hara, Senior Vice President - Americas. "This model line-up officially moves HDTV into the mainstream consumer market."

The RCA and PROSCAN HDTV family embraces five new models in screen sizes ranging from 34 inches (diagonal) to a huge 65-inch monitor.

Among the new introductions now in production is the RCA 38-inch F38310 (suggested retail price \$3,799), the world's largest direct-view HDTV in the widescreen 16x9 format. Like all fully integrated HDTVs from Thomson, the F38310 features built-in electronics to receive analog and digital over-the-air TV signals as well as standard and high-definition programming from DIRECTV.

Along with new direct-view models, Thomson's RCA and PROSCAN brands feature an impressive pair of widescreen rear projection HDTV monitors in giant 65- and 61-inch screen sizes.

**Thomson Consumer Electronics**

10330 North Meridian Street, Indianapolis, IN 46290 • Fax: (317) 587-6708

Among advanced performance and convenience features shared by the RCA and PROSCAN brand HDTV family are: 3DY/C Frame Comb Filters for virtual elimination of edge crawls and rainbow effects; Auto Color Control to maintain color integrity across the entire picture; High-Performance Scan Velocity Modulation for improved sharpness and detail; Dolby® Digital Surround Sound capability (when connected to a Dolby Digital amplifier and external speakers) and Broadcast Stereo audio capability; Front-Fired Speakers; Format Control; Advanced Twin-Tuner Picture-in-Picture, and Universal Glo-in-the-Dark Remote Control.

The full line-up of RCA and PROSCAN HDTV models includes:

### ***DIRECT-VIEW HDTV***

At 38 inches diagonal, the world's largest direct-view HDTV set is among the industry's most affordable at \$3,799. Offered in a contemporary "Venetian Suede" silver finish, the RCA F38310 will be joined by a sister 38-inch product from PROSCAN - the PS38000 - which features a \$3,999 suggested retail price (includes custom designed base).

Even more affordable for consumers who prefer direct-view performance is the PROSCAN 34-inch PS34000 (scheduled for later introduction) which commands a suggested retail price of \$3,499. Optional matching bases are available with the direct-view models.

Both the 38-inch and 34-inch 16x9 widescreen models are capable of displaying more than one million pixels of picture information with a 1080I scanning format. The two models feature a fully integrated electronics package that allows reception of over-the-air analog and digital signals as well as built-in standard DIRECTV service and HDTV programming from the DIRECTV satellite service.

Direct-view HDTVs feature Thomson's advanced PERFORMAX picture tubes, 20 watts of audio power, and the new SYNCROSCAN™ HD component video input for simple connection to digital components such as DVD players and digital cable TV set-top devices that use the Y Pr Pb component video connections. The advanced PERFORMAX picture tubes, manufactured at Thomson's Marion, Indiana color TV picture tube facility (the nation's largest such plant) feature a combination of leading-edge performance technologies. These include the Precision Focus HD Resolution Electron Gun and Digital Precision Pitch tube with .78mm INVAR shadow mask. This combination of technologies combine to support the resolution requirements of HDTV with the brightest possible picture.

## **REAR PROJECTION HDTV**

The RCA and PROSCAN brand rear-projection HDTVs provide some of the industry's largest digital viewing areas with 16x9 widescreen in 61- and 65-inches (diagonal) respectively. Like their direct-view counterparts, both the 61-inch RCA P61310 (suggested retail price \$4,999) and the 65-inch PROSCAN PS65000 (suggested retail price \$5,299) are fully integrated with built-in capability to receive analog, digital, and HDTV programming from terrestrial broadcasters and DIRECTV.

Among features of the rear projection models are one-million pixel Digital Video Resolution; High-Definition Optical System; Hi-Gain Dark-Tint Screen for 25 percent improved picture brightness, High-Resolution Projection Tubes, INTELLIFOCUS™ Auto Convergence, and Super Shield™ Built-in Screen Protector.

###

This press release contains forward-looking statements that involve a number of risks and uncertainties. Among the factors that could cause actual results to differ materially from those expected are the following: business conditions and general economic conditions; competitive factors such as pricing and marketing efforts of rival companies; timing of product introductions; ability of contract manufacturers to meet product price objectives and delivery schedules; legislative, regulatory, and industry initiatives that may affect planned or actual product features and marketing methods; and the pace and success of product research and development. For more information on the potential factors that could affect the company's financial results, please review the SEC filings of the company.

### **About THOMSON multimedia:**

With sales of 6.7 billion Euros (U.S. \$6.5 billion) in 1999 and 55,000 employees in more than 30 countries, THOMSON multimedia, is the world's fourth largest producer of consumer electronics. The Group has four principal activities: Displays and Components, Consumer Products, New Media Services, and Patents and Licensing. THOMSON multimedia engineers, manufactures, and markets display components and consumer products such as televisions, VCRs, audio systems, digital decoders, DVD players and professional video equipment under the popular RCA and THOMSON brand names. THOMSON multimedia is listed in the Paris (Sicovam: 18453) and New York (NYSE: TMS) stock exchanges. THOMSON multimedia is the parent company of the U.S.-based Thomson Consumer Electronics, Inc. For more information: <http://www.thomson-multimedia.com>

# RCA



# NEWS

---

**News Media Inquiries:** (317) 587-4450

**Contact:** Dave Arland, ArlandD@tce.com James Harper, HarperJ@tce.com

**www.rca.com**

---

## **EXPANDED FAMILY OF DIGITAL HI-RES MONITORS FROM THOMSON'S RCA, PROSCAN BRANDS OFFERS CONSUMER-FRIENDLY ROUTE TO DIGITAL HOME ENTERTAINMENT EXPERIENCE**

### ***Advanced Color TV Series Now Features Convenience of Interactive TV Guide***

INDIANAPOLIS, August 18, 2000 - Rich in both home entertainment options and user-friendly convenience features, a newly expanded series of RCA and PROSCAN brand Digital High-Resolution color TV monitors from THOMSON multimedia (NYSE: TMS) offers an affordable route to HDTV-quality picture performance and theatre-caliber audio capability along with computer-quality graphics and video gaming capabilities.

Both direct-view and rear projection RCA and PROSCAN brand Digital High-Resolution monitors - with screen sizes ranging from 27 inches to 61 inches (diagonal) - offer the full breadth of home-theatre entertainment options along with a host of potential interactive and data applications. Stunningly clear images and six-channel surround sound capability are easily achievable with the new series of monitors, and when connected to RCA and PROSCAN brand digital set-top converters like the RCA DTC100 or PSHD105 (both suggested retail price \$649), the consumer can receive digital programming with the lifelike brilliance of HDTV.

"When we introduced this new series of Digital High-Resolution monitors last year, we knew we were pushing the envelope for optimum home viewing enjoyment," said Thomson's Vic Theobalds, Vice President - TV Product Management, "but this year we challenged our product development team to seek even higher levels of excellence in both performance and convenience. We're confident the viewing public will agree that they have exceeded our expectations."

**Thomson Consumer Electronics**

10330 North Meridian Street, Indianapolis, IN 46290 • Fax: (317) 587-6708



For optimum performance, the Digital Hi-Res monitors are coupled with the DTC100 or PSHD105. The result is HDTV-quality picture performance with up to 1.3 million pixels in rear projection monitors and up to 864,000 pixels in direct-view models. Picture performance enhancements built into the monitors include a Deluxe Shielded Tuner With 181-Channel Tuning Capability that dramatically reduces ghosting caused from off-air pick-up when watching cable channels; Dynamic BlackStretch Circuitry that enhances contrast and detail; High Performance Scan Velocity Modulation that improves sharpness and detail, especially in high-contrast areas; and a High Performance Video Amplifier that optimizes performance from high-resolution signal sources such as the RCA DIRECTV satellite receiver, DVD players, and S-Video signals.

Additional performance technology provided in rear projection Digital Hi-Res Monitors include the new Intellifocus™ Auto Convergence that delivers the sharpest picture possible with corner-to-corner clarity; Custom Designed 5-Element Lens System that provides a brighter picture with improved corner focus and overall video resolution; 3DY/C Digital Frame Comb Filter that eliminates dot and edge crawl while providing for better transitions between scene changes; a High-Gain Dark-Tint Screen for 25 percent improved brightness; and Adjustable Color Warmth which enables the viewer to select one of three background color adjustments for personal viewing preference. Audio capability includes SRS Focus Audio Technology and Broadcast Stereo with dbx Noise Reduction. Additional features are interactive TV Guide program guide, Advanced Twin Tuner™ Picture-in-Picture, V-Chip Parental Control, Universal Glo-in-the-Dark Remote, built-in Super Shield screen protector, and seven sets of A/V inputs.

In direct-view Digital Hi-Res monitors, performance enhancements include a 3-Line Digital Comb Filter that virtually eliminates edge crawls and rainbow effects; Video Noise Reduction that provides a cleaner, more consistent overall picture; Auto Color Balance that maintains overall picture quality during the life of the tube; Auto Color Control that maintains natural flesh tones and color fidelity from channel-to-channel and scene-to-scene; Dark-Tint High-Contrast Picture Tube that delivers outstanding picture contrast even in bright room conditions; and a High-Resolution Dynamic Focus Electron Gun specifically designed to optimize picture performance from the Thomson-manufactured Digital Precision Pitch picture tube. Other features include SRS Focus Audio and Broadcast Stereo with dbx, Guide Plus+ Gold program guide, Advanced Twin-Tuner, Universal Glo-in-the-Dark Remote, and seven sets of A/V inputs.

An additional entertainment advantage of the new Digital Hi-Res monitors is the capability to accommodate a wide assortment of products with its multiple connections. Front-panel jacks include a USB port with the new Synchroscan™ HD Component and S-VGA video inputs for video games, camcorders, digital still cameras or regular and progressive scan DVD players. Back-panel connections easily accept computers or entertainment products such as RCA DIRECTV systems, VCRs, DVD players, HDTV Digital receivers, speaker or stereo systems, or cable boxes.

Among the added convenience features of this year's Digital Hi-Res line-up is the interactive on-screen TV Guide menu system which makes it even easier for the consumer to find his or her favorite program for near-instant viewing. Undecided about viewing choices? Simply use the remote control to browse through the Grid Guide and get TV listings, with program descriptions, up to 48 hours in advance. The Guide will even enable you to sort your favorite programs by theme, setting up a menu that allows you to select from categories of shows such as comedy, mystery and drama. Finally, if you want to record a show for later viewing, you can simply press the record button on the remote, and the EPG will automatically record it on your VCR through an IR connection.

Perhaps even more appealing for today's busy consumer is the ease in which these highly advanced digital monitors go to work in delivering entertainment. Simply plug in the television, and the auto-tuning feature will lock in your local and cable channels. If you have external A/V components connected to the set, the TV will automatically adjust for each product. All systems are integrated with the pre-programmed remote control. For example, when the DVD button on the remote is pressed, the TV switches to the DVD input and the remote changes functions to control the DVD player.

Following are the monitors included in this year's RCA and PROSCAN brand series:

### **RCA**

Four models comprise the RCA line-up of digital high-resolution color TV monitors. They are the 61-inch MM61110 (suggested retail price \$3,299) and the 52-inch MM52110 (suggested retail price \$2,799) rear projection models and the direct-view 36-inch MM36110 (suggested retail price \$2,199) and the 32-inch MM32110 (suggested retail price \$1,749), both of which are available with an optional custom base.

## **PROSCAN**

The five PROSCAN models include the rear-projection 61-inch PS61810 (suggested retail price \$3,799), and the 52-inch PS52810 (suggested retail price \$2,999) and three direct-view models, the 36-inch PS36810 (suggested retail price \$2,699), the 32-inch PS32810 (suggested retail price \$2,199), and the 27-inch PS27810 (suggested retail price \$1,299).

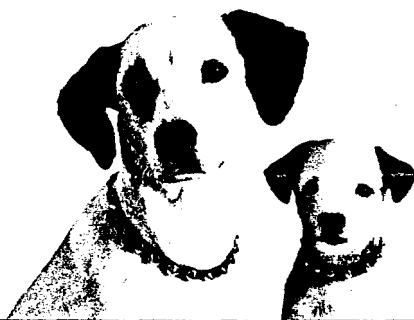
###

This press release contains forward-looking statements that involve a number of risks and uncertainties. Among the factors that could cause actual results to differ materially from those expected are the following: business conditions and general economic conditions; competitive factors such as pricing and marketing efforts of rival companies; timing of product introductions; ability of contract manufacturers to meet product price objectives and delivery schedules; legislative, regulatory, and industry initiatives that may affect planned or actual product features and marketing methods; and the pace and success of product research and development. For more information on the potential factors that could affect the company's financial results, please review the SEC filings of the company.

### **About THOMSON multimedia:**

With sales of 6.7 billion Euros (U.S. \$6.5 billion) in 1999 and 55,000 employees in more than 30 countries, THOMSON multimedia, is the world's fourth largest producer of consumer electronics. The Group has four principal activities: Displays and Components, Consumer Products, New Media Services, and Patents and Licensing. THOMSON multimedia engineers, manufactures, and markets display components and consumer products such as televisions, VCRs, audio systems, digital decoders, DVD players and professional video equipment under the popular RCA and THOMSON brand names. THOMSON multimedia is listed in the Paris (Sicovam: 18453) and New York (NYSE: TMS) stock exchanges. THOMSON multimedia is the parent company of the U.S.-based Thomson Consumer Electronics, Inc. For more information: <http://www.thomson-multimedia.com>

# RCA



# NEWS

---

**News Media Inquiries:** (317) 587-4450

**Contact:** Dave Arland, ArlandD@tce.com James Harper, HarperJ@tce.com

**www.rca.com**

---

## **CBS AND RCA JOIN FORCES TO PRESENT SUPER BOWL XXXV AND AFC PLAYOFFS IN HDTV**

NEW YORK and INDIANAPOLIS, August 18, 2000 -- CBS Television and THOMSON multimedia's RCA brand have entered into an advertising agreement for Thomson (NYSE: TMS) to underwrite the costs of producing high-definition coverage of Super Bowl XXXV as well as the four AFC playoff games.

Produced by CBS, the five live HDTV telecasts will be produced and transmitted independent of the regularly scheduled CBS football coverage being broadcast on the traditional analog network. All NFL HDTV programming will be broadcast in 1920 x 1080i, the highest-definition widescreen digital television format.

The five games are: AFC Wildcard: Sunday, December 31, 2000; AFC Division playoffs: Saturday, January 6, and Sunday, January 7, 2001; The AFC Championships: Sunday, January 14 and Super Bowl XXXV, Sunday January 28, from Tampa, Florida.

"CBS Sports is pleased to partner with Thomson and further the network's position as a leader in the digital sports television area," said Sean McManus, President, CBS Sports. "From primetime to the best in sports television to the most watched television event of the year, CBS continues to create more opportunities than other network for viewers to enjoy high-definition television in all dayparts."

**Thomson Consumer Electronics**

10330 North Meridian Street, Indianapolis, IN 46290 • Fax: (317) 587-6708

"As the consumer electronics sponsor for the NFL and a leading manufacturer of digital television products, RCA is the ideal company to bring the finale of the football season to homes in HDTV," said Tom Wardrop, Vice President - Advertising, Americas for RCA. "The Super Bowl is the most watched program all year on television, and we expect that America's favorite broadcast will spur interest in America's favorite TV brand - RCA. Once football fans see their favorite games in HDTV, they'll never want to go back to the same old screen," Wardrop said.

Thirty-one of CBS's owned and affiliated stations are currently broadcasting in digital, covering approximately 45% of the nation. By the end of the year, CBS expects to be transmitting digital programming across approximately 41 stations, reaching approximately 58% of the U.S.

The consumer electronics industry's most comprehensive selection of digital television products is available from RCA, the brand that introduced commercial television service. RCA digital TV products include an affordable set-top DTC100 HDTV receiver (\$649 suggested retail price). The versatile and affordable DTC100 receives over-the-air analog and digital broadcasts, as well as standard and high-definition services from the DIRECTV satellite system.

RCA also offers a line of projection and direct-view Digital High-Resolution Monitors and has just introduced a new, fully-integrated 38-inch widescreen HDTV set (\$3,799 suggested retail price). The 38-inch RCA HDTV is now shipping to retailers and allows viewers to watch over-the-air analog and digital programming from local broadcasters as well as standard digital and high-definition programs from the DIRECTV satellite service.

###

This press release contains forward-looking statements that involve a number of risks and uncertainties. Among the factors that could cause actual results to differ materially from those expected are the following: business conditions and general economic conditions; competitive factors such as pricing and marketing efforts of rival companies; timing of product introductions; ability of contract manufacturers to meet product price objectives and delivery schedules; legislative, regulatory, and industry initiatives that may affect planned or actual product features and marketing methods; and the pace and success of product research and development. For more information on the potential factors that could affect the company's financial results, please review the SEC filings of the company.

**About THOMSON multimedia:**

With sales of 6.7 billion Euros (U.S. \$6.5 billion) in 1999 and 55,000 employees in more than 30 countries, THOMSON multimedia, is the world's fourth largest producer of consumer electronics. The Group has four principal activities: Displays and Components, Consumer Products, New Media Services, and Patents and Licensing. THOMSON multimedia engineers, manufactures, and markets display components and consumer products such as televisions, VCRs, audio systems, digital decoders, DVD players and professional video equipment under the popular RCA and THOMSON brand names. THOMSON multimedia is listed in the Paris (Sicovam: 18453) and New York (NYSE: TMS) stock exchanges. THOMSON multimedia is the parent company of the U.S.-based Thomson Consumer Electronics, Inc. For more information: <http://www.thomson-multimedia.com>

\* \* \*

Press Contacts:	Dana McClintock	LeslieAnne Wade	Dave Arland
	CBS Corporation	CBS Sports	RCA
	(212) 975-1077	(212) 975-5171	(317) 587-4450